

# ATLANTA Economic Review

Vol. I, No. 12

January 15, 1952

Prepared monthly as a service to Atlanta citizens by the Council on Economic Research, Atlanta Division, University of Georgia

A NEW EVAPORATED MILK--A BOMBSHELL FOR THE DAIRY INDUSTRY?---Willys R. Knight

It is possible that the fluid milk industry in the United States stands at the threshold of a new era of distribution which may have revolutionary implications both for producers and marketing agencies. The potential bombshell is neither a law nor a ruling of any governmental body; rather, it is a technological development--a new method of evaporating and canning milk.

Milk contains about 87 per cent water, and the notion of removing a large proportion of it and canning the remainder so as to ship the product over a wide area economically is not new, of course. Years ago enterprising businessmen began to can evaporated milk, and their product is now familiar to everyone. Probably the chief drawback to its wider use today is that it does not taste like fresh milk when reconstituted. The new development in this field, as revealed by laboratory experiments, is that an evaporated product can be made which has no "off" flavor.

A limiting factor holding back the wide-scale adoption of this technique now is the necessity of processing the milk almost immediately after it leaves the cow. In spite of this drawback, newspaper reports relate that a factory in the Northwest began to evaporate and can milk utilizing the new process several months ago. It is reported that the output is being sent to American troops overseas.

If the technique of production is improved so as to overcome the present limitations, and if consumers accept this new canned milk readily (as they did concentrated orange juice), the milk industry in this country is destined for some very upsetting developments. For one thing, it will severely challenge our currently dominant system of milk distribution (via home delivery routes), for the new product (like the present evaporated milk) will probably be distributed through food stores. Secondly, producers will be vitally affected as the wide differentials which now exist in the price paid for fluid<sup>1</sup> milk in the United States begin to disappear, and a rather uniform nation-wide price develops. (See Table 1 for evidence of the wide price differentials existing today for fluid milk.) Thirdly, it is possible that people might increase their consumption of milk after the adoption of the new product (though this is a matter on which we can only speculate).

It may be worthwhile to review briefly the reason why a rather uniform nation-wide milk price will emerge if the new product should come into wide-

<sup>1</sup>"Fluid" milk means milk which is pasteurized and bottled for immediate consumption in cities. The other great use of milk is for "manufacturing" purposes (butter, cheese, evaporated, etc.).

spread use. Both theory and practice indicate that a wide variation in price cannot exist over the nation for a commodity which can be shipped at low cost

Table 1. Dealers' buying and selling prices for fluid milk, selected cities, November 1951.

Cities	Buying price* (per cwt.)	Selling price** (per qt.)	Usual fat con- tent of the bottled milk
Boston, Mass.	\$ 6.43	24	3.7
Buffalo, N. Y.	6.20	24	3.5-3.7
Grand Rapids, Mich.	4.75	20	3.6-3.7
Houston, Texas	6.85	25	4.0
Los Angeles, Cal.	5.32	21 $\frac{1}{2}$	3.55
Macon, Ga.	6.41	25	4.0
Miami, Fla.	6.80	26	4.0-4.4
Milwaukee, Wis.	4.45	19	3.7
Seattle, Wash.	5.46	21	3.5
Washington, D. C.	6.60	23 $\frac{1}{2}$	3.7-4.0
Winona, Minn.	3.91	18	†

Source: Evaporated, Condensed, and Dry Milk Report (U. S. Department of Agriculture publication), November 1951.

\*Paid for (or adjusted to) a 3.5 per cent fat content.

\*\*On a delivered-to-home basis. In most of the cities no discount exists for milk sold on a cash-and-carry basis.

†Information not available.

for long distances. Illustrative of this principle is the fact that there are now only small differences in the price paid for milk throughout the United States by factories which evaporate and can the product. (Table 2.)

Table 2. Average prices paid producers by condenseries for 3.5 per cent milk (f.o.b. plant), Oct. 1951, seven geographic regions.

Regions	Average prices†
New England	*
Middle Atlantic	\$3.81
South Atlantic	3.46
East North Central	3.54
West North Central	3.36
South Central	3.33
Northwestern	3.42
Southwestern	3.62

Source: Evaporated, Condensed, and Dry Milk Report (U. S. Department of Agriculture publication), November, 1951.

\*Information not available.

†Per cwt.

If the cost of processing by the new technique turns out to be as little per can as by the method now widely in use, it will mean substantial savings to consumers in many places in the nation. For example, evaporated milk (old process) now sells at retail in Atlanta for 13 cents per can (14½ oz.); when reconstituted with water, this is equivalent to milk at 14.4 cents per quart. Obviously, this is much lower than the current price of 25 cents per quart charged for bottled pasteurized milk. This economy, if achieved for the new kind of evaporated milk, will induce many consumers to shift to it, if and when it appears on the market.

Will milk producers in any particular area be benefitted (or injured) if the new product is widely accepted? Those in low-cost areas (like Wisconsin and Minnesota) will be aided because processors will tend to settle there. On the other hand, production in regions wherein farmers rely heavily on high prices will be undermined. It is not to be expected, however, that milk production will cease entirely in any region of the country because some low-cost producers exist in all areas. Furthermore, costs of production will adjust somewhat (by a complicated process involving a change in land values particularly), tending to bring them closer together across the nation. Nevertheless, the low-cost areas will be greatly stimulated and the high-cost ones severely shaken.

This whole development casts a disturbing shadow over the rising dairy industry of the Southeast. Most of the milk produced in our region goes into fluid use, and for this milk our farmers get prices among the highest in the nation. To what extent would our magnificent progress in dairying during the last couple decades be checked (or even reversed) should it be necessary to lower milk prices to the national competitive level?

In a more optimistic vein, let us look at this new development from a different angle in order to see the potential opportunity it presents to our region. Supposing we could, through the application of the best production techniques, get our cost of production as low as that of any other area, then a large number of processing plants might be attracted to the Southeast. This would mean thousands of jobs for town people and a greatly expanded market for the milk from tens of thousands of farms in this region.

-----

#### BUSINESS LIBRARY OF THE ATLANTA DIVISION CONTINUES RAPID GROWTH:

The acquisition of books and periodicals on business and economics subjects is continuing at a rapid pace. The business library of the Atlanta Division of the University of Georgia has expanded its resources tremendously in the past several years. Latest acquisitions which have been catalogued are listed below:

##### ECONOMICS

- Merritt - Destination Unknown.
- Lasser - What You Should Know about Estate and Gift Taxes.
- Robinson - Management of Bank Funds.
- Roberts - Annotated Forms for Tax Practice.
- Goldenweiser - American Monetary Policy.
- Peffer - Closing of Public Domain.
- Hopkins - History of Hemp Industry in Kentucky.
- Lutz - Theory of Investment of the Firm.

(cont'd)

Faulkner - Decline of Laissez Faire, 1897-1917.  
Herling - Soviet Slave Empire.  
Lohman - Wall Street Explains Its Operations.  
Brems - Product Equilibrium.  
U. S. Bureau of Labor Statistics - Occupational Outlook Handbook.  
Conference on Business Cycles.  
Slichter - What's Ahead for American Business.

TRANSPORTATION

Owen - Toll Roads.  
Hart - Story of American Roads.  
Ritter - Highway Engineering.

BUSINESS

Kerekes - Report Preparation.  
Clegg's - International Directory of World's Bank Trade.  
Moore - Human Side of Selling.  
Taylor - C. P. A. Problems and Questions (2d ed., 1951).  
Spriegel - Retail Personnel Management.  
Ullyett - In Quest of Clocks.  
Melnitsky - Management of Industrial Inventory.  
Newman - Administrative Action.  
Moore - Production Control.

---

Atlanta Division  
UNIVERSITY OF GEORGIA  
24 Ivy Street, S. E.  
ATLANTA 3, GEORGIA

Sec. 34.66, P. L. & R.  
U. S. POSTAGE  
PAID  
ATLANTA, GEORGIA  
Permit No. 153

